

# Safety Data Sheet

Material Name: XP-61

## \*\*\* Section 1 - Product and Company Identification \*\*\*

### Manufacturer Information

Fireside Coatings  
9526 Argyle Forest Blvd  
Ste B2 #311  
Jacksonville, FL 32222  
USA

Phone: 904-451-3914

## \*\*\* Section 2 - Hazards Identification \*\*\*

### GHS Classification:

Carcinogenicity - Category 2

### GHS LABEL ELEMENTS

#### Symbol(s)



### Signal Word

Warning

### Hazard Statements

Suspected of causing cancer.

### Precautionary Statements

#### Prevention

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Use personal protective equipment as required.

#### Response

IF exposed or concerned: Get medical advice/attention.

#### Storage

Store locked up.

#### Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

## \*\*\* Section 3 - Composition / Information on Ingredients \*\*\*

CAS #	Component	Percent
7732-18-5	Water	43.08-49.44
1314-23-4	Zirconium oxide	11.16-13.944
1312-76-1	Potassium silicate	11.52-12.96
1344-28-1	Aluminum oxide	8-12
1308-38-9	Chromium (III) oxide	4-7
1344-09-8	Sodium silicate	4.4-5.6

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409-21-2	Silicon carbide	3.6-5.4
7782-75-4	Magnesium hydrogen phosphate, trihydrate	3-5
7631-86-9	Silica, amorphous	0.17-0.86

## \* \* \* Section 4 - First Aid Measures \* \* \*

### First Aid: Eyes

Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists get medical attention.

### First Aid: Skin

For skin contact, flush with large amounts of water. If irritation persists, get medical attention.

### First Aid: Ingestion

If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting.

### First Aid: Inhalation

If the affected person is not breathing, apply artificial respiration.

## \* \* \* Section 5 - Fire Fighting Measures \* \* \*

### General Fire Hazards

See Section 9 for Flammability Properties.

None

### Hazardous Combustion Products

Not Determined.

### Extinguishing Media

Use appropriate extinguishing media for surrounding fire.

### Unsuitable Extinguishing Media

None

### Fire Fighting Equipment/Instructions

Firefighters should wear full protective gear.

## \* \* \* Section 6 - Accidental Release Measures \* \* \*

### Recovery and Neutralization

Stop the flow of material, if this is without risk.

### Materials and Methods for Clean-Up

Absorb spill with inert material. Shovel material into appropriate container for disposal.

### Emergency Measures

Isolate area. Keep unnecessary personnel away.

### Personal Precautions and Protective Equipment

Wear appropriate protective equipment and clothing during clean-up.

### Environmental Precautions

Do not allow product to enter sewer or waterways.

### Prevention of Secondary Hazards

None

## \* \* \* Section 7 - Handling and Storage \* \* \*

### Handling Procedures

Avoid contact with skin and eyes. Wash thoroughly after handling.

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## Storage Procedures

Keep this material in a cool, well-ventilated place.

## Incompatibilities

Not Determined.

## \* \* \* Section 8 - Exposure Controls / Personal Protection \* \* \*

### Component Exposure Limits

#### Aluminum oxide (215-691-6)

- Austria: 10 mg/m<sup>3</sup> STEL [KZW] (alveolar dust, respirable fraction, smoke, 2 X 60 min)  
5 mg/m<sup>3</sup> TWA [TMW] (alveolar dust, respirable fraction, smoke)  
Belgium: 1 mg/m<sup>3</sup> TWA (as Al)  
Denmark: 5 mg/m<sup>3</sup> TWA (total, as Al); 2 mg/m<sup>3</sup> TWA (respirable, as Al)  
France: 10 mg/m<sup>3</sup> TWA [VME]  
Germany: 4 mg/m<sup>3</sup> TWA MAK (dust, inhalable fraction); 1.5 mg/m<sup>3</sup> TWA MAK (dust, respirable fraction)  
Greece: 10 mg/m<sup>3</sup> TWA (inhalable fraction); 5 mg/m<sup>3</sup> TWA (respirable fraction)  
Portugal: 10 mg/m<sup>3</sup> TWA [VLE-MP] (particulate matter containing no Asbestos and < 1% Crystalline silica)  
Spain: 10 mg/m<sup>3</sup> TWA [VLA-ED]  
Sweden: 5 mg/m<sup>3</sup> LLV (total dust, as Al); 2 mg/m<sup>3</sup> LLV (respirable dust, as Al)

#### Silicon carbide (206-991-8)

- ACGIH: 10 mg/m<sup>3</sup> TWA (nonfibrous, inhalable fraction, particulate matter containing no asbestos and <1% crystalline silica); 3 mg/m<sup>3</sup> TWA (nonfibrous, respirable fraction, particulate matter containing no asbestos and <1% crystalline silica); 0.1 fiber/cm<sup>3</sup> TWA (as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination., respirable fibers, including whiskers, length >5 µm, aspect ratio ≥3:1)  
Austria: 10 mg/m<sup>3</sup> STEL [KZW] (fiber free, respirable fraction, 2 X 60 min)  
5 mg/m<sup>3</sup> TWA [TMW] (fiber-free, respirable fraction)  
Belgium: 10 mg/m<sup>3</sup> TWA; 0.1 fiber/cm<sup>3</sup> TWA (fibers including whiskers, alveolar fraction)  
Finland: 0.1 fiber/cm<sup>3</sup> TWA  
France: 10 mg/m<sup>3</sup> TWA [VME]  
Germany: 1.5 mg/m<sup>3</sup> TWA MAK (respirable fraction, without fibers)  
Greece: 10 mg/m<sup>3</sup> TWA (inhalable fraction); 5 mg/m<sup>3</sup> TWA (respirable fraction)  
Ireland: 10 mg/m<sup>3</sup> TWA (total inhalable dust); 4 mg/m<sup>3</sup> TWA (respirable dust)  
Portugal: 10 mg/m<sup>3</sup> TWA [VLE-MP] (nonfibrous, inhalable fraction, particulate matter containing no Asbestos and < 1% Crystalline silica); 3 mg/m<sup>3</sup> TWA [VLE-MP] (nonfibrous, respirable fraction, particulate matter containing no Asbestos and <1% Crystalline silica); 0.1 fiber/cm<sup>3</sup> TWA [VLE-MP] (respirable fibers, including whiskers, length >5 µm, aspect ratio ≥3:1, as determined by the membrane filter method using phase-contrast illumination)  
Spain: 10 mg/m<sup>3</sup> TWA [VLA-ED] (no fibers, inhalable fraction); 3 mg/m<sup>3</sup> TWA [VLA-ED] (no fibers, respirable fraction)  
Sweden: 0.2 fiber/cm<sup>3</sup> LLV (respirable fiber, listed under Man made inorganic crystalline fibers)

#### Silica, amorphous (231-545-4)

- Austria: 4 mg/m<sup>3</sup> TWA [TMW] (inhalable fraction); 0.3 mg/m<sup>3</sup> TWA [TMW] (respirable fraction)  
Germany: 4 mg/m<sup>3</sup> TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, inhalable fraction)  
4 mg/m<sup>3</sup> TWA MAK (inhalable fraction)  
Ireland: 6 mg/m<sup>3</sup> TWA (total inhalable dust); 2.4 mg/m<sup>3</sup> TWA (respirable dust)

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## Engineering Measures

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

## Personal Protective Equipment: Respiratory

If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

## Personal Protective Equipment: Hands

Use impervious gloves.

## Personal Protective Equipment: Eyes

Wear safety glasses; chemical goggles (if splashing is possible).

## Personal Protective Equipment: Skin and Body

Normal work clothing (long sleeved shirts and long pants) is recommended.

### \*\*\* Section 9 - Physical & Chemical Properties \*\*\*

<b>Appearance:</b>	Green	<b>Odor:</b>	Characteristic
<b>Physical State:</b>	Liquid	<b>pH:</b>	ND
<b>Vapor Pressure:</b>	ND	<b>Vapor Density:</b>	ND
<b>Boiling Point:</b>	ND	<b>Melting Point:</b>	NA
<b>Solubility (H2O):</b>	Soluble	<b>Specific Gravity:</b>	ND
<b>Evaporation Rate:</b>	ND	<b>VOC:</b>	ND
<b>Octanol/H2O Coeff.:</b>	ND	<b>Flash Point:</b>	ND
<b>Flash Point Method:</b>	ND	<b>Upper Flammability Limit</b>	ND
		<b>(UFL):</b>	
<b>Lower Flammability Limit</b>	ND	<b>Burning Rate:</b>	ND
<b>(LFL):</b>			
<b>Auto Ignition:</b>	ND		

### \*\*\* Section 10 - Chemical Stability & Reactivity Information \*\*\*

## Chemical Stability

This is a stable material.

## Hazardous Reaction Potential

Will not occur.

## Conditions to Avoid

None

## Incompatible Products

Not Determined

## Hazardous Decomposition Products

Not Determined.

### \*\*\* Section 11 - Toxicological Information \*\*\*

## Acute Toxicity

## Component Analysis - LD50/LC50

**Water (7732-18-5)**

Oral LD50 Rat >90 mL/kg

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### Potassium silicate (1312-76-1)

Oral LD50 Rat 1300 mg/kg

### Aluminum oxide (1344-28-1)

Oral LD50 Rat >5000 mg/kg

### Sodium silicate (1344-09-8)

Oral LD50 Rat 1153 mg/kg; Dermal LD50 Rabbit >4640 mg/kg

### Silica, amorphous (7631-86-9)

Oral LD50 Rat >5000 mg/kg; Inhalation LC50 Rat >2.2 mg/L 1 h; Dermal LD50 Rabbit >2000 mg/kg

## Potential Health Effects: Skin Corrosion Property/Stimulativeness

May cause skin irritation.

## Potential Health Effects: Eye Critical Damage/ Stimulativeness

May cause eye irritation.

## Potential Health Effects: Ingestion

Not considered a likely route of exposure under normal product use conditions. May cause gastrointestinal harm if ingested.

## Potential Health Effects: Inhalation

No inhalation effects are anticipated during normal product handling conditions.

## Respiratory Organs Sensitization/Skin Sensitization

This product is not reported to have any sensitization effects.

## Generative Cell Mutagenicity

This product is not reported to have any mutagenic effects.

## Carcinogenicity

### A: General Product Information

Suspect of causing cancer.

### B: Component Carcinogenicity

#### Chromium (III) oxide (1308-38-9)

IARC: Monograph 49 [1990]; Supplement 7 [1987]; Monograph 23 [1980]; Monograph 2 [1973] (Group 3 (not classifiable))

#### Silicon carbide (409-21-2)

ACGIH: A2 - Suspected Human Carcinogen (fibrous, including whiskers)

#### Silica, amorphous (7631-86-9)

IARC: Monograph 68 [1997]; Supplement 7 [1987] (Group 3 (not classifiable))

## Reproductive Toxicity

This product is not reported to have any reproductive toxicity effects.

## Specified Target Organ General Toxicity: Single Exposure

This product is not reported to have any single exposure specific target organ toxicity effects.

## Specified Target Organ General Toxicity: Repeated Exposure

This product is not reported to have any repeat exposure specific target organ toxicity effects.

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## Aspiration Respiratory Organs Hazard

This product is not reported to have any aspiration hazard effects.

### \*\*\* Section 12 - Ecological Information \*\*\*

#### Ecotoxicity

##### A: General Product Information

This product is not reported to have any ecotoxicity effects.

##### B: Component Analysis - Ecotoxicity - Aquatic Toxicity

###### Potassium silicate (1312-76-1)

###### Test & Species

###### Conditions

96 Hr LC50 Lepomis macrochirus	301-478 mg/L
96 Hr LC50 Brachydanio rerio	3185 mg/L [semi-static]
96 Hr EC50 Daphnia magna	216 mg/L

###### Sodium silicate (1344-09-8)

###### Test & Species

###### Conditions

96 Hr LC50 Lepomis macrochirus	301-478 mg/L
96 Hr LC50 Brachydanio rerio	3185 mg/L [semi-static]
96 Hr EC50 Daphnia magna	216 mg/L

###### Silica, amorphous (7631-86-9)

###### Test & Species

###### Conditions

96 Hr LC50 Brachydanio rerio	5000 mg/L [static]
72 Hr EC50 Pseudokirchneriella subcapitata	440 mg/L
48 Hr EC50 Ceriodaphnia dubia	7600 mg/L

#### Persistence/Degradability

No information available for the product.

#### Bioaccumulation

No information available for the product.

#### Mobility in Soil

No information available for the product.

### \*\*\* Section 13 - Disposal Considerations \*\*\*

#### Waste Disposal Instructions

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

#### Disposal of Contaminated Containers or Packaging

Dispose of contents/container in accordance with local/regional/national/international regulations.

### \*\*\* Section 14 - Transportation Information \*\*\*

#### IATA Information

Shipping Name: Not Regulated

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## ICAO Information

**Shipping Name:** Not Regulated

## IMDG Information

**Shipping Name:** Not Regulated

### \* \* \* Section 15 - Regulatory Information \* \* \*

## Regulatory Information

### EU MARKING AND LABELLING:

**Symbol(s):**

None

**Risk Phrases:**

None

### Substance Analysis - Inventory

Component/CAS	EC #	EEC	CAN	TSCA
Water 7732-18-5	231-791-2	EINECS	DSL	Yes
Zirconium oxide 1314-23-4	215-227-2	EINECS	DSL	Yes
Potassium silicate 1312-76-1	215-199-1	EINECS	DSL	Yes
Aluminum oxide 1344-28-1	215-691-6	EINECS	DSL	Yes
Chromium (III) oxide 1308-38-9	215-160-9	EINECS	DSL	Yes
Sodium silicate 1344-09-8	215-687-4	EINECS	DSL	Yes
Silicon carbide 409-21-2	206-991-8	EINECS	DSL	Yes
Magnesium hydrogen phosphate, trihydrate 7782-75-4	-	No	No	No
Silica, amorphous 7631-86-9	231-545-4	EINECS	DSL	Yes

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<b>* * * Section 16 - Other Information * * *</b>
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## Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists; ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail; ADR/RID = European Agreement of Dangerous Goods by Road/Rail; AS = Standards Australia; DFG = Deutsche Forschungsgemeinschaft; DOT = Department of Transportation; DSL = Domestic Substances List; EEC = European Economic Community; EINECS = European Inventory of Existing Commercial Chemical Substances; ELINCS = European List of Notified Chemical Substances; EU = European Union; HMIS = Hazardous Materials Identification System; IARC = International Agency for Research on Cancer; IMO = International Maritime Organization; IATA = International Air Transport Association; MAK = Maximum Concentration Value in the Workplace; NDSL = Non-Domestic Substances List; NFPA = National Fire Protection Association; NOHSC = National Occupational Health & Safety Commission; NTP = National Toxicology Program; STEL = Short-term Exposure Limit; TDG = Transportation of Dangerous Goods; TLV = Threshold Limit Value; TSCA = Toxic Substances Control Act; TWA = Time Weighted Average

## Literature References

None

End of Sheet